

(19) World Intellectual Property  
Organization  
International Bureau



531442

(43) International Publication Date  
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number  
**WO 2004/036303 A1**

(51) International Patent Classification<sup>7</sup>: **G02F 1/136**

(21) International Application Number:  
**PCT/KR2003/000146**

(22) International Filing Date: 23 January 2003 (23.01.2003)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:  
10-2002-0062409 14 October 2002 (14.10.2002) KR

(71) Applicant (for all designated States except US): **SAM-SUNG ELECTRONICS CO., LTD.** [KR/KR]; 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HONG, Mun-Pyo** [KR/KR]; 112-205 Hansolmaeul Cheonggu Apt., Jeongja-dong, Bundang-ku, Seongnam-city, Kyungki-do 463-914 (KR). **ROH, Nam-Seok** [KR/KR]; 607-703

Hyojachon Hwaseong Apt., Seodang-dong, Bundang-ku, Seongnam-city, Kyungki-do 463-055 (KR). **CHOE, Hee-Hwan** [KR/KR]; 807-209 Jugong Apt., Mansujugong 8danji, Mansu 1-dong, Namdong-ku, Incheon-city 405-241 (KR). **SONG, Keun-Kyu** [KR/KR]; 7-1 Nongseo-ri, Giheung-eub, Yongin-city, Kyungki-do 449-901 (KR).

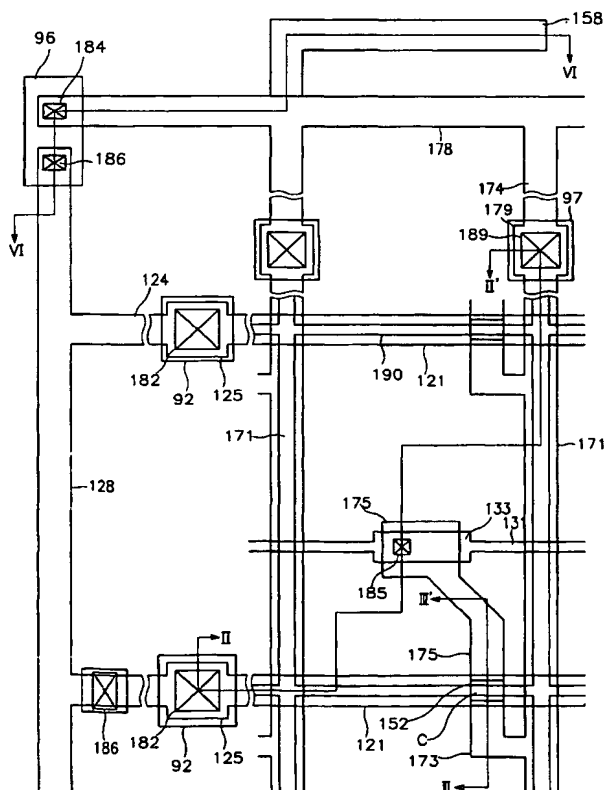
(74) Agent: **YOU ME PATENT & LAW FIRM**; Teheran Bldg., 825-33 Yoksam-dong, Kangnam-ku, Seoul 135-080 (KR).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A THIN FILM TRANSLATOR ARRAY PANEL AND A METHOD FOR MANUFACTURING THE PANEL



(57) Abstract: A gate wire including a gate line and a gate electrode is formed on a substrate and a gate insulating layer is formed on the substrate. A semiconductor pattern and an etching assistant pattern are formed on the gate insulating layer and a source/drain conductor pattern and an etching assistant layer are formed on the semiconductor pattern and the etching assistant pattern. A data wire including a data line and source and drain electrodes separated from each other is formed by removing the etching assistant layer and partly removing the source/drain conductor pattern. A pixel electrode connected to the drain electrodes is formed.

WO 2004/036303 A1